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**13. ABSTRACT** *(Maximum 200 Words)*

While the largest preventable cause of illness and death in our society today is tobacco, 29.9% of military personnel continue to smoke (Bray, R., Sanchez, R., Ornstein, M. et al., 1999). The primary objective of this study is to evaluate whether the implementation of a specialized intervention program will result in lower smoking cessation rates among active duty personnel and TRICARE Prime beneficiaries. Sixteen military installations (4 installations each from Air Force, Army, Marines, and Navy) will be assigned to either an intervention or delayed intervention condition. At the end of this first year of the study, several research accomplishments have been achieved. These research accomplishments include identifying participants within the Air Force, developing the survey instrument, and clearly defining the elements of the intervention. The intervention is to include community, pharmacotherapy, and training components designed for systems change and capacity building.

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## INTRODUCTION:

The primary objective of this study is to evaluate whether the implementation of a specialized intervention program will result in lower smoking cessation rates among active duty personnel and TRICARE Prime beneficiaries. Sixteen military installations (four installations each from Air Force, Army, Marines, and Navy) will be assigned to either an intervention or delayed intervention condition. The intervention is to include community, pharmacotherapy, and training components designed for systems change and capacity building.

## BODY:

At the end of this first year of the study, several research accomplishments have been achieved. These research accomplishments include attaining institutional review board clearance, identifying participants within the Air Force, developing the survey instrument, and clearly defining elements of the intervention. The intervention is to include community, pharmacotherapy, and training components designed for systems change and capacity building.

The attainment of institutional review board (IRB) clearance has been an arduous process. We needed approval from the IRBs at the University of Minnesota, the University of Missouri-Kansas City, University of Memphis, Fort Detrick, and Wilford Hall. Each IRB had its own set of questions and concerns that needed to be attended to and any amendments then needed to be approved by all other IRBs. This process will continue as we move to the Navy, Army, and Marines, which will also have their own independent IRBs that will need to approve the research protocol. We have recently begun the IRB process for the Navy.

Identifying Air Force base participants included a number of important steps. First, a request for participants was sent to 69 Air Force bases in the continental United States. Twenty-one bases subsequently volunteered for the study. Bases were matched on various characteristics including base size, mission, structure and highest smoking prevalence. Eventually four bases were selected and randomly assigned to either an "intervention" or "delayed intervention" condition, in accordance with the nested cohort design of this study. Bases assigned to intervention are Tinker and Whiteman; the delayed intervention bases are Hill and Minot.

Developing the survey instruments was also time consuming as a number of stakeholders had comments regarding survey content and survey distribution. The surveys will provide the critical outcome data for the study including prevalence of smoking and other tobacco use at baseline and changes in tobacco use patterns among baseline tobacco users at the 18-month follow-up. Approval of a $2 incentive was attained once it was determined that all participants would receive the $2 whether or not they completed the survey. There had also been some concern about other health related behaviors being queried in the survey, which was also approved once it was acknowledged that some health statements are required to be reported for active duty personnel only. While the development and IRB approval of the bases took considerable time, approval of the survey instrument was eventually attained. The survey is to be sent to participating Air Force bases in early November, 2001.

The intervention is being created to fit the needs of each individual base while maintaining fidelity with the components of the intervention across bases. In order to accomplish this goal, several conferences had been conducted with leading tobacco researchers across the country to determine the broad intervention for the bases. These conferences were held on April 4-6, 2001; April 30-May 1, 2001; June 3-4, 2001; and August 20-21, 2001. During these meetings, a

number of key components of the intervention were determined, including a community component, a pharmacotherapy component, and a training component. Task forces were assigned to each component in order to flesh out the details of each. These components are outlined below.

The community component is designed to provide resources for base personnel to decrease the smoking prevalence within the base community. These resources are specifically tailored for pharmacists, commanders, pediatricians, primary care physicians, dentists, public affairs personnel, health and wellness center staff, and the integrated delivery system (IDS) team. These resources are provided in an 18-month plan that suggests potential events and resources designed to decrease smoking. They include events designed to educate the base population on the harms of tobacco; advertisements/brochures on smoking cessation strategies; suggested anti-tobacco articles to run in base newspapers; resources for clinicians; and reminders to base personnel on free nicotine replacement and zyban medication therapy during the course of this study. Additionally, a website has been developed for the "intervention" bases that will provide resources, information, key contacts, links to other sites, and a listserv. Each of these aspects of the community component is designed to increase the systems capacity to change smoking prevalence on base.

Pharmacotherapy is another important component of this intervention. It is strongly recommended via the VA/DoD clinical practice guidelines that all smokers (except those with medical contraindications, pregnant women, and adolescents) utilize nicotine replacement therapy in attempts to stop smoking. The task force for this component of the intervention has been identifying companies that would provide nicotine replacement therapy at a significantly reduced cost, evaluating the current guidelines established by the VA/DoD, and including those specifics in the training manuals for tobacco cessation specialists.

The third prong of this intervention is a training component designed to educate key base personnel on brief tobacco counseling techniques. The training, developed by the University of Arizona, Arizona State University, and Northern Arizona University, and funded by the Arizona Department of Health, has been modified to include military specific information. The three manuals include a Basic Skills Guide, an Instructors Manual, and a Speakers Kit. These manuals are an integral part of the training component. To prepare the research staff on training base personnel on these training techniques, key researchers participated in the training at the facilities located at the University of Arizona in Tucson.

In order to assess the depth of impact that the components have on smoking prevalence at each base, a variety of mechanisms have been created. These mechanisms are designed to evaluate whether or not these components have been implemented and to what extent. Mechanisms include pre-post questionnaires for health promotion managers, pre-post questionnaires for the chief of primary care, collection of base policies regarding tobacco use and cessation, and a system to evaluate base newspapers. The health promotion manager questionnaire evaluates the extent of tobacco cessation programs on base, types of smoking related paraphernalia used (e.g., pamphlets, videos, handouts), pharmacological use to curb desire to resume smoking, and the extent to which the VA/DoD toolkit paraphernalia have been implemented. The chief of primary care questionnaire evaluates the extent to which health care professionals assess and intervene on tobacco use, inquires about documentation of counseling for smoking cessation, and assesses the extent to which nicotine replacement therapy is prescribed for treatment. In order to assess newspapers regarding smoking related information, we have collected a year's worth of

newspapers for each of the four bases (pre-intervention) as well as signed up to receive future papers. Additionally, we have developed a coding system to evaluate tobacco related information in base newspapers. This information will provide important details regarding the actual implementation of various aspects of the intervention.

The collection of materials from each participating base has also been fraught with its own difficulties. Our initial teleconference with all four bases designed to introduce the research team to each Air Force site had been scheduled for the morning of September 11, 2001. The extremely unfortunate events of that ill-fated day threw our military into high alert and understandably curbed the progression of our smoking evaluation. Subsequent military alerts and deployment of key personnel delayed the rescheduling of the teleconference for three and a half weeks. While the project remained important, the events of September 11 slowed its progression.

**KEY RESEARCH ACCOMPLISHMENTS:**

- IRB Clearance
- Assessment Measure
- Training
- Community component development
- Pharmacotherapy component development
- Creating a website for "intervention" sites
- Soliciting and identifying Air Force bases
- Collecting base newspapers from participating bases
- Developing questionnaires for health promotion managers and chief of primary care
- Beginning the IRB process and identification of potential sites for the Navy

**REPORTABLE OUTCOMES:**

Not applicable.

**CONCLUSIONS:**

Presently, we are on track with this project. The Air Force bases have been selected and intervention components have been developed. Further, the IRB process for the Navy has begun as we prepare to intervene on our next branch of the United States military. With smoking reduction an important contributor to military readiness, never has this study been more important.

**REFERENCES:**

Not applicable

**APPENDICES:**

Not applicable